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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,667	07/12/2001	Katsutoshi Nishimoto	109498	2099
25944	7590	10/18/2004		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER CABRERA, ZOILA E	
			ART UNIT 2125	PAPER NUMBER

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/902,667

Applicant(s)

NISHIMOTO ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on July 9, 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 10/15/04.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 9 and 17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1, 4-9, 12-17 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inui et al. (US 5,204,821)** in view of **Andrade, JR. et al. (US 2003/0109950 A1)**.

Regarding claims 1, 9 and 17, **Inui** discloses a parts procurement system comprising:

- virtual production line preparation means for preparing a virtual production line in which objects manufactured thereon are virtually placed in sequence based on long-term production plan data covering variable production of the objects and fixed production plan data covering fixed production of the objects (Col. 1, lines 17-28; Col. 2, lines 57-62; Col. 4, lines 13-29); and parts ordering means for determining parts and the number of the parts necessary for manufacturing the

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objects on the virtual production line prepared by the virtual production line preparation means (Col. 1, lines 48-52; Fig. 6(1)), as well as calculating the parts ordering timing based on a production timing of the objects and parts delivery lead time (Col. 4, lines 41-47; Col. 5, lines 48-52; Col. 7, lines 27-28).

As for claims 4-8, 12-16 and 20-24, **Inui** further discloses,

- the parts ordering means places orders based on the calculated parts ordering timing (Col. 4, lines 41-47; Col. 5, lines 48-52; Col. 7, lines 27-28);
- the parts ordering means establishes a communication link with at least one supplier of the parts to order the parts (Fig. 1, element 21; Abstract, lines 8-9);
- the fixed production plan data relates to production of the objects over a first~ time period and the long-term production plan data relates to production of the objects over a second time period that is longer than the first time period (Col. 1, lines 20-28, i.e., monthly corresponds to long-term and few days before actual assembly corresponds to fixed period);
- the objects are vehicles (Fig. 1, element 13);
- the vehicles are automobiles (fig. 1, element 13a).

**Inui** discloses most of the limitations of claims 1, 9 and 17. However, **Inui** does not disclose long term production plan data that is more than one month. But **Andrade** discloses a method and system for planning operation in manufacturing plants wherein long term production plan data is more than one month (Page 1, [0002], lines 1-3; [0007], lines 12-15). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the parts supply system of **Inui** with the system for planning operations in a manufacturing plant of **Andrade** because it would provide a planning system to optimally allocate equipment capacity to expected orders in a multiple production line manufacturing plant.

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4. Claims 2-3, 10-11 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inui et al. (US 5,204,821)** and **Andrade** as applied to claims 1, 9 and 17 above and further in view of **Nam (US 6,141,598)**.

**Inui** and **Andrade** disclose the limitations of claims 1, 9 and 17 above but fail to disclose the limitations of claims 2-3, 10-11 and 18-19. However, **Nam** discloses such limitations as follows:

- correction means for correcting the virtual production line prepared by the virtual production line preparation means according to actual production results of the objects (Col. 8, lines 43-46), wherein the parts ordering means places a parts order after calculating the parts ordering timing based on the corrected virtual production line (Fig. 4A, S113 and Fig. 4B, S115, S135, S136; Col. 8, lines 42-51);
- the correction means changes the virtual production line by correcting at least one parameter out of a production sequence change, a design change of the object, a production progress, and a parts procurement lead time (Fig. 7, i.e. Relabeling).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Inui** and **Andrade** with the system of **Nam** because it would provide an improved system and method which increases productivity by balancing the assembly process so that production processes are not overburdened while others remain idle.

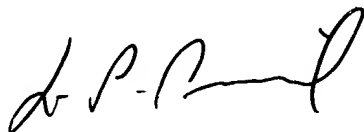
**Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday). If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera  
Patent Examiner  
10/15/04



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SUPERVISORY PATENT EXAMINER  
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